

526 797

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
25 March 2004 (25.03.2004)

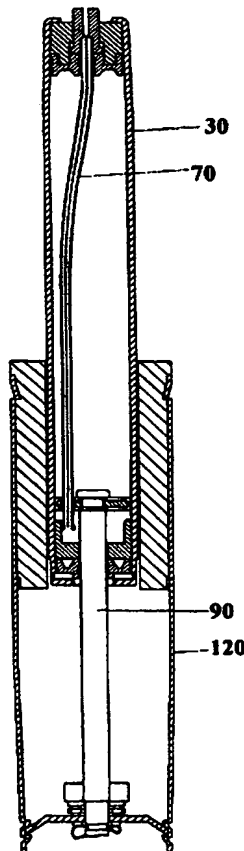
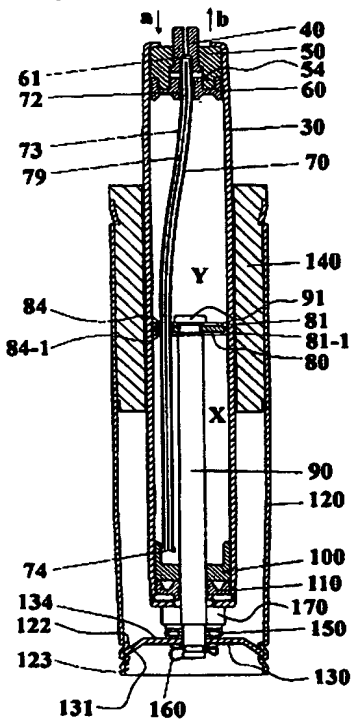
PCT

(10) International Publication Number
WO 2004/023936 A1

- (51) International Patent Classification⁷: A47C 3/30 (74) Agent: HAN, Sang Hyuk; 4F, Hyesung B/D, 115-12, Nonhyeon-dong, Kangnam-gu, Seoul 135-821 (KR).
- (21) International Application Number: PCT/KR2003/001854 (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (22) International Filing Date: 9 September 2003 (09.09.2003) (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 10-2002-0054651 10 September 2002 (10.09.2002) KR
- (71) Applicant and
(72) Inventor: CHUNG, Eui Hyup [KR/KR]; 105-1001, Byouksan Apt, 2606, Bokdae-dong,, Heungdeok-gu, Cheongju-shi, Chungcheongbuk-do 361-815 (KR).

[Continued on next page]

(54) Title: LENGTH ADJUSTABLE GAS SPRING



(57) **Abstract:** Whereas existing length adjustable gas spring is comprised of double cylinder structure that is made up of external cylinder (10a) and internal cylinder (44a), length adjustable gas spring of this invention is made up of merely one cylinder (30). It is comprised of single cylinder structure in which pipe for gas transport (70, 70', 70'', 70*) penetrates through the inside of this piston. Accordingly, this invention minimizes the number of parts that are assembled inside the cylinder (30), and simplifies structure of parts, which translates into the turning point for quality enhancement and reduction in the production cost. This invention is configured in a way that the spindle support (130) is fixated between the projected outward projection (122) and projected outward projection (123) that is projected out into the inner direction at the lower part of the outer drum (120). Moreover, it is possible to easily realize new functions that could not be realized on existing double cylinder structured matter due to structural limitation on this single cylinder structured length adjustable gas spring.

WO 2004/023936 A1



Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.